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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,381	12/03/2003	Han-Choon Lee	040044-0306859	3140
909	7590 06/13/2005		EXAMINER	
PILLSBU	RY WINTHROP SHA	DOTY, HEATHER ANNE		
P.O. BOX 1		ART UNIT	PAPER NUMBER	
MCLEAN, VA 22102			2813	THE DICTION DON

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Summary	10/725,381	LEE, HAN-CHOON				
Onice Action Summary	Examiner	Art Unit				
	Heather A. Doty	2813				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the co	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w.  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	ely filed  will be considered timely. he mailing date of this communication. 0 (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 03 De	Responsive to communication(s) filed on <u>03 December 2003</u> .					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowar	·	1				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims		:				
4) ⊠ Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) 1-15 are subject to restriction and/or expressions.		· · · ·				
Application Papers						
9)☐ The specification is objected to by the Examiner 10)☒ The drawing(s) filed on <u>03 December 2003</u> is/an Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correction 11)☐ The oath or declaration is objected to by the Ex	re: a) accepted or b) objected or b)	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	te				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	5)  Notice of Informal Pa	atent Application (PTO-152)				

## **DETAILED ACTION**

## Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I. A method for forming a barrier metal of a semiconductor device. wherein a SiH<sub>4</sub> layer is deposited (claims 1, 3, 5, 7, 9, 11, and 13-15 appear to read on this species).

Species II. A method for forming a barrier metal of a semiconductor device. wherein a Si layer is deposited (claims 2, 4, 6, 8, 10, and 12 appear to read on this species).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently no claim is generic. As presently written, claim 2 appears to depends upon claim 1. However, as claim 2 substitutes Si for the SiH4 of claim 1, this dependency is improper because claim 2 does not contain all elements of claim 1.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Heather A. Doty whose telephone number is 571-272-

8429. The examiner can normally be reached on M-F, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Carl Whitehead, Jr. can be reached on 571-272-1702. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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CRAIG A. THOMPSON
PRIMARY EXAMINER

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